

Sequence Listing

<110> Universitaet Leipzig

<120> Method and Means for the Determination of Defined States or Modifications in the Mucus of the Uterus or in the Epithelium of Other Organs

<130> 401P07PCT-US

<140> 10/559,406

<141> 2006-05-30

<150> PCT/DE04/01210

<151> 2004-06-04

<150> DE10325639.3

<151> 2003-06-06

<150> DE10325638.5

<151> 2003-06-06

<160> 15

<210> 1

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope e-beta-9 (e-beta-hCG)

<400> 1

Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala
1 5 10 15

<210> 2

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope beta-9 (t?hCG)

<400> 2

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala
1 5 10 15

<210> 3

<211> 15

<212> PRT

<213> artificial sequence

<220>

<223> Epitope e-beta-1 (e-beta-hCG)

<400> 3

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr
1 5 10 15

<210> 4
 <211> 15
 <212> PRT
 <213> artificial sequence
 <220>
 <223> Epitope beta-1 (t-beta-hCG)
 <400> 4

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr
 1 5 10 15

<210> 5
 <211> 861
 <212> DNA
 <213> homo sapiens
 <220>
 <223> beta-hCG beta-7 cDNA-Sequenz
 <400> 5

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tctcgcccc	cgaagggtta	gtgtccagct	cactccagca	tcctacaacc	tcctggtggc	300
cttgacgccc	ccacaaaccc	gaggtataaa	gccaggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
catccaagga	gatgcttcgg	ccacggtgcc	gccccatcaa	tgccaccctg	gctgtggaga	480
aggagggctg	ccccgtgtgc	atcacctca	acaccaccat	ctgtgccggc	tactgcccc	540
ccatgacccg	cgtgtgcag	ggggctcctgc	cggccctgcc	tcagggtgtg	tgcaactacc	600
gcgatgtgcg	cttcgagtc	atccggctcc	ctggctgccc	gcgcggcgctg	aaccccgctg	660
tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgacct	ccgcttccag	gcctcctctt	780
cctcaaaggc	ccctcccccc	agccttccaa	gtccatccc	actcccgggg	ccctcggaca	840
ccccgatcct	cccacaataa	a				861

<210> 6
 <211> 861
 <212> DNA
 <213> homo sapiens
 <220>
 <223> beta-hCG beta-6 cDNA-Sequenz
 <400> 6

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actgagtctc	agaggtcact	tcaccgtggt	ctccgcctca	tccttggcgc	tagaccactg	180
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cttgccgccc	ccacaaaccc	gaggtatgaa	gccaggtaca	ccaggcaggg	gacgcaccaa	360
ggatggagat	gttccagggg	ctgctgctgt	tgctgctgct	gagcatgggc	gggacatggg	420
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aggagggctg	ccccgtgtgc	atcacctca	acaccaccat	ctgtgccggc	tactgcccc	540
ccatgacccg	cgtgtgcag	ggggctcctgc	cggccctgcc	tcagggtgtg	tgcaactacc	600
gcgatgtgcg	cttcgagtc	atccggctcc	ctggctgccc	gcgcggcgctg	aaccccgctg	660
tctcctacgc	cgtggctctc	agctgtcaat	gtgcactctg	ccgccgcagc	accactgact	720
gcgggggtcc	caaggaccac	cccttgacct	gtgatgacct	ccgcttccag	gcctcctctt	780
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ccccgatcct	cccacaataa	a				861

<210> 7
 <211> 861
 <212> DNA
 <213> homo sapiens
 <220>
 <223> e-beta-hCG ("endo" beta-6e) cDNA-Sequenz
 <400> 7

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actgagtctc agaggtcact tcaccgtggt ctccgcctca tccttggygc tagaccactg 180
aggggagagg actgggggtgc tccgctgagc cactcctgtg cctccctggc cttgtctact 240
tctcgcccc cgaagggtta gtgtcsagct cactccagca tcctacaacc tcctgggtggc 300
cttgmcgccc ccacaamccc gaggtatraa gccagggtaca ccaggcaggg gacgcaccaa 360
ggatggagat gttccagggg ctgctgctgt tgctgctgct gagcatgggc gggacatggg 420
catccargga gmyrcttcgg ccacggtgcc gcccacatcaa tgccaccctg gctgtggaga 480
aggagggctg ccccgctgtgc atcacctca acaccacccat ctgtgccggc tactgcccc 540
ccatgacccg cgtgctgcag ggggtcctgc cggccctgcc tcagggtggtg tgcaactacc 600

gcgatgtgcg cttcgagtc atccggctcc ctggctgccc gcgcggcgctg aaccccggtg 660
tctcctacgc cgtggctctc agctgtcaat gtgcactctg ccgcgcgagc accactgact 720
gcgggggtcc caaggaccac cccttgacct gtgatgaccc ccgcttcag gcctcctctt 780
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ccccgatcct ccacaataa a 861
  
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<210> 8
 <211> 165
 <212> PRT
 <213> homo sapiens
 <220>
 <223> t-beta-hCG beta-5,beta-8,beta-3(prehormone)
 <400> 8

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Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
-20              -15              -10              -5

Gly Thr Trp Ala Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro Ile
      -1  1              5              10

Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
      15              20              25

Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
      30              35              40

Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
45              50              55              60

Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
      65              70              75

Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
      80              85              90

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
      95              100             105

Thr Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser Ser Ser Lys Ala Pro
  
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110		115		120											
Pro	Pro	Ser	Leu	Pro	Ser	Pro	Ser	Arg	Leu	Pro	Gly	Pro	Ser	Asp	Thr
125				130						135					140

Pro Ile Leu Pro Gln
145

<210> 9
 <211> 165
 <212> PRT
 <213> homo sapiens
 <220>
 <223> beta-hCG beta-7 (prehormone)
 <400> 9

Met	Glu	Met	Phe	Gln	Gly	Leu	Leu	Leu	Leu	Leu	Leu	Ser	Met	Gly
-20				-15					-10					-5

Gly	Thr	Trp	Ala	Ser	Arg	Glu	Met	Leu	Arg	Pro	Arg	Cys	Arg	Pro	Ile
			-1	1				5					10		

Asn	Ala	Thr	Leu	Ala	Val	Glu	Lys	Glu	Gly	Cys	Pro	Val	Cys	Ile	Thr
	15					20						25			

Val	Asn	Thr	Thr	Ile	Cys	Ala	Gly	Tyr	Cys	Pro	Thr	Met	Met	Arg	Val
30						35					40				

Gly	Val	Leu	Gln	Leu	Pro	Ala	Leu	Pro	Gln	Val	Val	Cys	Asn	Tyr	Arg
45					50					55					60

Asp	Val	Arg	Phe	Glu	Ser	Ile	Arg	Leu	Pro	Gly	Cys	Pro	Arg	Gly	Val
			65						70					75	

Asn	Pro	Val	Val	Ser	Tyr	Ala	Val	Ala	Leu	Ser	Cys	Gln	Cys	Ala	Leu
		80						85					90		

Cys	Arg	Arg	Ser	Thr	Thr	Asp	Cys	Gly	Gly	Pro	Lys	Asp	His	Pro	Leu
	95						100					105			

Thr	Cys	Asp	Asp	Pro	Arg	Phe	Gln	Ala	Ser	Ser	Ser	Ser	Lys	Ala	Pro
110						115						120			

Pro	Pro	Ser	Leu	Pro	Ser	Pro	Ser	Arg	Leu	Pro	Gly	Pro	Ser	Asp	Thr
125					130					135					140

Pro Ile Leu Pro Gln
145

<210> 10
 <211> 165
 <212> PRT
 <213> homo sapiens
 <220>
 <223> e-beta-hCG beta-6e (with Arg in Pos 2) (prehormone)
 <400> 10

Met Glu Met Phe Gln Gly Leu Leu Leu Leu Leu Leu Leu Ser Met Gly
 -20 -15 -10 -5

 Gly Thr Trp Ala Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro Ile
 -1 1 5 10

 Asn Ala Thr Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
 15 20 25

 Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
 30 35 40

 Gly Val Leu Gln Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr Arg
 45 50 55 60

 Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
 65 70 75

 Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser Cys Gln Cys Ala Leu
 80 85 90

 Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
 95 100 105

 Thr Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser Ser Ser Lys Ala Pro
 110 115 120

 Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
 125 130 135 140

 Pro Ile Leu Pro Gln
 145

<210> 11
 <211> 141
 <212> PRT
 <213> homo sapiens
 >220>
 <223> beta-LH beta-4 (prehormone)
 <400> 11

Met Glu Met Leu Gln Gly Leu Leu Leu Leu Leu Leu Ser Met Gly
 -20 -15 -10 -5

 Gly Ala Trp Ala Ser Arg Glu Pro Leu Arg Pro Trp Cys His Pro Ile
 -1 +1 5 10

 Asn Ala Ile Leu Ala Val Glu Lys Glu Gly Cys Pro Val Cys Ile Thr
 15 20 25

 Val Asn Thr Thr Ile Cys Ala Gly Tyr Cys Pro Thr Met Met Arg Val
 30 35 40

Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val Cys Thr Tyr Arg
 45 50 55 60
 Asp Val Arg Phe Glu Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val
 65 70 75
 Asp Pro Val Val Ser Phe Pro Val Ala Leu Ser Cys Arg Cys Ala Pro
 80 85 90
 Cys Arg Arg Ser Thr Ser Asp Cys Gly Gly Pro Lys Asp His Pro Leu
 95 100 105
 Thr Cys Asp His Pro Glu Leu Ser Gly Leu Leu Phe Leu
 110 115 120

<210> 12
 <211> 10
 <212> PRT
 <213> artificial sequence
 <220>
 <223> Peptide P1 (e-beta-hCG)
 <400> 12

Cys Asp Asp Pro Arg Phe Gln Ala Ser Ser
 1 5 10

<210> 13
 <211> 10
 <212> PRT
 <213> artificial sequence
 <220>
 <223> Peptide K1 (t-beta-hCG)
 <400> 13

Cys Asp Asp Pro Arg Phe Gln Asp Ser Ser
 1 5 10

<210> 14
 <211> 11
 <212> PRT
 <213> artificial sequence
 <220>
 <223> Peptide P2 (e-beta-hCG)
 <400> 14

Ser Arg Glu Met Leu Arg Pro Arg Cys Arg Pro
 1 5 10

<210> 15
 <211> 11
 <212> PRT
 <213> artificial sequence
 <220>
 <223> Peptide K2 (t-beta-hCG)
 <400> 15

Ser Lys Glu Pro Leu Arg Pro Arg Cys Arg Pro
 1 5 10